



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,080	05/15/2001	Kevin Collins	10006721-1	2538

7590 04/12/2006
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

BATURAY, ALICIA

ART UNIT PAPER NUMBER

2155

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/858,080

Applicant(s)

COLLINS ET AL.

Examiner

Alicia Baturay

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to the amendment filed 1 February 2006.
2. Claims 1-21 are pending in this Office Action.

Response to Amendment

3. The rejection is respectfully maintained as set forth in the last Office Action mailed on 2 September 2005. Applicant's arguments with respect to claims 1-21 have been fully considered but they are not persuasive and the old rejection maintained.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1, 4, 5, 8, 13, 14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan et al. (U.S. 6,640,278) and further in view of Kanada (US 2001/0039576 A1).
6. With respect to claim 1, Nolan teaches a method for managing transactions at a network storage device (Nolan, col. 1, lines 27-29) comprising:

Art Unit: 2155

Receiving an incoming transaction (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device (Nolan, col. 2, lines 46-49) and assigning a priority to the incoming transaction (Nolan, col. 27, lines 65-67) relative to other incoming transactions (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device.

Nolan does not explicitly teach a usage policy.

However, Kanada teaches a usage policy (Kanada, page 1, paragraph 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

7. With respect to claim 4, Nolan teaches the invention described in claim 1, including ordering the transaction among other transactions in a queue at the network storage device (Nolan, Fig. 29; col. 29, lines 29-35).

8. With respect to claim 5, Nolan teaches managing transactions at a network storage device (Nolan, col. 1, lines 27-29) comprising:

Prioritizing a plurality of incoming transactions received at the network storage device relative to one another (Nolan, col. 28, line 66 – col. 29, line 35).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches generating a usage policy for the network storage device and distributing the usage policy to the network storage device (Kanada, Fig. 2 and Fig. 3B, element 387; page 10, paragraph 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

9. With respect to claim 8, Nolan teaches an apparatus for managing a plurality of incoming transactions (Nolan, col. 28, line 66 – col. 29, line 35) at a network storage device (Nolan, col. 2, lines 46-49), comprising:

Computer readable storage medium at the network storage device (Nolan, col. 2, lines 46-49) and comprising program code for prioritizing the plurality of incoming transactions relative to one another (Nolan, col. 28, line 66 – col. 29, line 35).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches a usage policy stored on the computer readable storage medium (Kanada, page 1, paragraph 8); and computer readable program code residing in the computer readable storage medium, based on the usage policy (Kanada, Fig. 3B, element 387; page 10, paragraph 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy.

One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

10. With respect to claim 13, Nolan teaches an apparatus for managing a plurality of incoming and outgoing transactions at a network storage device (Nolan, col. 28, line 66 – col. 29, line 35), comprising:

Computer readable storage medium (Nolan, col. 2, lines 46-49); and computer readable program code residing in the storage medium, including program code for prioritizing the plurality of incoming and outgoing transactions relative to one another (Nolan, col. 28, line 66 – col. 29, line 35).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches a usage policy being stored on a network storage device (Kanada, page 2, paragraph 28) and ability to prioritize transactions based on a usage policy (Kanada, Fig. 3B, element 387; page 10, paragraph 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

Art Unit: 2155

11. With respect to claim 14, Nolan teaches the invention described in claim 13, including computer readable storage medium (Nolan, col. 2, lines 46-49); and computer readable program code residing in the storage medium, including program code for prioritizing the plurality of incoming and outgoing transactions relative to one another (Nolan, col. 28, line 66 – col. 29, line 35).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches the ability to define a usage policy at a policy management server and the ability to distribute it to a network storage device (Kanada, page 14, paragraph 188).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

12. With respect to claim 16, Nolan teaches the invention described in claim 13, including a method for managing transactions at a network storage device (Nolan, col. 1, lines 27-29) comprising:

Computer readable storage medium (Nolan, col. 2, lines 46-49); and computer readable program code residing in the storage medium, including program code for prioritizing the plurality of incoming and outgoing transactions relative to one another (Nolan, col. 28, line 66 – col. 29, line 35).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches a usage policy (Kanada, page 1, paragraph 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

13. With respect to claim 17, Nolan teaches the invention described in claim 16, including computer readable storage medium (Nolan, col. 2, lines 46-49); and computer readable program code residing in the storage medium, including program code for prioritizing the plurality of incoming and outgoing transactions relative to one another (Nolan, col. 28, line 66 – col. 29, line 35).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches the ability to install on a policy management server (Kanada, page 3, paragraph 66), define a usage policy and install the policy on a network storage device (Kanada, page 14, paragraph 188), and prioritize a number of transactions (Kanada, Fig. 3B, element 387; page 10, paragraph 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal

Art Unit: 2155

human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

14. With respect to claim 18, Nolan teaches the invention described in claim 13, including where the transactions are incoming to the network storage device (Nolan, col. 28, line 66 – col. 29, line 35).

15. With respect to claim 19, Nolan teaches the invention described in claim 13, including where the transactions are outgoing from the network storage device (Nolan, col. 28, line 66 – col. 29, line 35).

16. Claim 2, 6, 9, and 15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan in view of Kanada and further in view of Gibson et al ("Network Attached Storage Architecture, 2000).

17. With respect to claim 2, Nolan teaches the invention described in claim 1, including identifying a network storage device on a network (Nolan, col. 25, lines 26-29).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches receiving the usage policy at the network storage device (Kanada, page 14, paragraph 188).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

Nolan teaches the invention described in claim 1, including identifying a network storage device on a network (Nolan, col. 25, lines 26-29).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches receiving the usage policy at the network storage device (Kanada, page 14, paragraph 188).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

The combination of Nolan and Kanada does not explicitly teach use of a NAS.

However, Gibson states that the technologies of NAS and SAN are converging (page 42, "Converging of NAS and SAN").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Nolan and Kanada in view of Gibson in order to enable the use of a NAS. One would be motivated to do so in order to view storage techniques as interchangeable alternatives for solving the same set of customer problems.

Art Unit: 2155

18. With respect to claim 6, Nolan teaches the invention described in claim 5, including identifying a network storage device on a network (Nolan, col. 25, lines 26-29).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches receiving the usage policy at the network storage device (Kanada, page 14, paragraph 188).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

Nolan teaches the invention described in claim 1, including identifying a network storage device on a network (Nolan, col. 25, lines 26-29).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches receiving the usage policy at the network storage device (Kanada, page 14, paragraph 188).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

The combination of Nolan and Kanada does not explicitly teach use of a NAS.

Art Unit: 2155

However, Gibson states that the technologies of NAS and SAN are converging (page 42, "Converging of NAS and SAN").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Nolan and Kanada in view of Gibson in order to enable the use of a NAS. One would be motivated to do so in order to view storage techniques as interchangeable alternatives for solving the same set of customer problems.

19. With respect to claim 9, Nolan teaches the invention described in claim 8, including identifying a network storage device on a network (Nolan, col. 25, lines 26-29).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches receiving the usage policy at the network storage device (Kanada, page 14, paragraph 188).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

Nolan teaches the invention described in claim 1, including identifying a network storage device on a network (Nolan, col. 25, lines 26-29).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches receiving the usage policy at the network storage device (Kanada, page 14, paragraph 188).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

The combination of Nolan and Kanada does not explicitly teach use of a NAS.

However, Gibson states that the technologies of NAS and SAN are converging (page 42, "Converging of NAS and SAN").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Nolan and Kanada in view of Gibson in order to enable the use of a NAS. One would be motivated to do so in order to view storage techniques as interchangeable alternatives for solving the same set of customer problems.

20. With respect to claim 15, Nolan teaches the invention described in claim 13, including identifying a network storage device on a network (Nolan, col. 25, lines 26-29).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches receiving the usage policy at the network storage device (Kanada, page 14, paragraph 188).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal

Art Unit: 2155

human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

Nolan teaches the invention described in claim 1, including identifying a network storage device on a network (Nolan, col. 25, lines 26-29).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches receiving the usage policy at the network storage device (Kanada, page 14, paragraph 188).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

The combination of Nolan and Kanada does not explicitly teach use of a NAS.

However, Gibson states that the technologies of NAS and SAN are converging (page 42, "Converging of NAS and SAN").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Nolan and Kanada in view of Gibson in order to enable the use of a NAS. One would be motivated to do so in order to view storage techniques as interchangeable alternatives for solving the same set of customer problems.

Art Unit: 2155

21. Claim 3, 7, 10, 11, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan in view of Kanada and further in view of Comer ("Internetworking with TCP/IP, 1995).

22. With respect to claim 3, Nolan teaches the invention described in claim 1, including a method further comprising:

Receiving an incoming transaction (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device (Nolan, col. 2, lines 46-49) and assigning a priority to the incoming transaction (Nolan, col. 27, lines 65-67) relative to other incoming transactions (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device.

Nolan does not explicitly teach a usage policy.

However, Kanada teaches reading meta data from the transaction; and comparing the meta data to a number of rules defined in the usage policy, where assigning priority to the transaction is based on at least part of the meta data satisfying at least one condition of the number of rules (Kanada, Fig. 3B, element 381; page 10, paragraph 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

Nolan teaches the invention described in claim 1, including a method further comprising:

Receiving an incoming transaction (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device (Nolan, col. 2, lines 46-49) and assigning a priority to the incoming transaction (Nolan, col. 27, lines 65-67) relative to other incoming transactions (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device.

Nolan does not explicitly teach a usage policy.

However, Kanada teaches reading meta data from the transaction; and comparing the meta data to a number of rules defined in the usage policy, where assigning priority to the transaction is based on at least part of the meta data satisfying at least one condition of the number of rules (Kanada, Fig. 3B, element 381; page 10, paragraph 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

The combination of Nolan and Kanada does not explicitly teach the use of meta data.

However, the Microsoft Computer Dictionary defines “meta data” as “data about data.” Comer teaches the use of a packet that includes a header which contains information about the contents of the data and a data area (Comer, page 92, Fig. 7.2), and the header also contains information on the precedence of the packet (Comer, page 93, Fig. 7.4). In the Differentiated Services technique, Kanada describes the DSCP as a value that describes an aggregate of packets (Kanada, page 1, paragraph 19), and therefore this header would be considered meta data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Nolan and Kanada in view of Comer in order to enable the use of meta data. One would have been motivated to do so because all three references discuss the TCP/IP protocol (Nolan, col. 8, lines 20-21; Kanada, page 5, paragraph 88, Comer, page 92), which include a packet structure that includes a header and a data area.

23. With respect to claim 7, Nolan teaches the invention described in claim 5, including a method further comprising:

Receiving an incoming transaction (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device (Nolan, col. 2, lines 46-49) and assigning a priority to the incoming transaction (Nolan, col. 27, lines 65-67) relative to other incoming transactions (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device.

Nolan does not explicitly teach a usage policy.

However, Kanada teaches a usage policy comprising of a number of rules (Kanada, Fig. 4A; page 2, paragraph 21), each defining a meta data and a corresponding priority (Kanada, page 6, paragraphs 100-106).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

Nolan teaches the invention described in claim 1, including a method further comprising:

Receiving an incoming transaction (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device (Nolan, col. 2, lines 46-49) and assigning a priority to the incoming transaction (Nolan, col. 27, lines 65-67) relative to other incoming transactions (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device.

Nolan does not explicitly teach a usage policy.

However, Kanada teaches reading meta data from the transaction; and comparing the meta data to a number of rules defined in the usage policy, where assigning priority to the transaction is based on at least part of the meta data satisfying at least one condition of the number of rules (Kanada, Fig. 3B, element 381; page 10, paragraph 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

The combination of Nolan and Kanada does not explicitly teach the use of meta data.

However, the Microsoft Computer Dictionary defines “meta data” as “data about data.” Comer teaches the use of a packet that includes a header which contains information about the contents of the data and a data area (Comer, page 92, Fig. 7.2), and the header also contains information on the precedence of the packet (Comer, page 93, Fig. 7.4). In the Differentiated Services technique, Kanada describes the DSCP as a value that describes an aggregate of packets (Kanada, page 1, paragraph 19), and therefore this header would be considered meta data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Nolan and Kanada in view of Comer in order to enable the use of meta data. One would have been motivated to do so because all three references discuss the TCP/IP protocol (Nolan, col. 8, lines 20-21; Kanada, page 5, paragraph 88, Comer, page 92), which include a packet structure that includes a header and a data area.

24. With respect to claim 10, Nolan teaches the invention described in claim 8, including a method further comprising:

Receiving an incoming transaction (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device (Nolan, col. 2, lines 46-49) and assigning a priority to the incoming transaction (Nolan, col. 27, lines 65-67) relative to other incoming transactions (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device.

Nolan does not explicitly teach a usage policy.

However, Kanada teaches a usage policy comprising of a number of rules (Kanada, Fig. 4A; page 2, paragraph 21), which define a number of priorities for a number of meta data, where the program code assigns one of the priorities to one of the transactions when the transaction satisfies at least one of the rules (Kanada, Fig. 3B, element 381; page 10, paragraph 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal

human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

Nolan teaches the invention described in claim 1, including a method further comprising:

Receiving an incoming transaction (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device (Nolan, col. 2, lines 46-49) and assigning a priority to the incoming transaction (Nolan, col. 27, lines 65-67) relative to other incoming transactions (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device.

Nolan does not explicitly teach a usage policy.

However, Kanada teaches a usage policy comprising of a number of rules (Kanada, Fig. 4A; page 2, paragraph 21), which define a number of priorities for a number of meta data, where the program code assigns one of the priorities to one of the transactions when the transaction satisfies at least one of the rules (Kanada, Fig. 3B, element 381; page 10, paragraph 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

The combination of Nolan and Kanada does not explicitly teach the use of meta data.

However, the Microsoft Computer Dictionary defines “meta data” as “data about data.” Comer teaches the use of a packet that includes a header which contains information about the contents of the data and a data area (Comer, page 92, Fig. 7.2), and the header also

contains information on the precedence of the packet (Comer, page 93, Fig. 7.4). In the Differentiated Services technique, Kanada describes the DSCP as a value that describes an aggregate of packets (Kanada, page 1, paragraph 19), and therefore this header would be considered meta data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Nolan and Kanada in view of Comer in order to enable the use of meta data. One would have been motivated to do so because all three references discuss the TCP/IP protocol (Nolan, col. 8, lines 20-21; Kanada, page 5, paragraph 88, Comer, page 92), which include a packet structure that includes a header and a data area.

25. With respect to claim 11, Nolan teaches the invention described in claim 8, including receiving an incoming transaction (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device (Nolan, col. 2, lines 46-49) and assigning a priority to the incoming transaction (Nolan, col. 27, lines 65-67) relative to other incoming transactions (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device.

Nolan does not explicitly teach a usage policy.

However, Kanada teaches the use of a packet being transmitted from one network device to another (Kanada, page 1, paragraph 17), and the meta data field being read against a usage policy (Kanada, page 1, paragraph 19) and the transaction ordered in a queue according to priority (Kanada, page 10, paragraph 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy.

One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

Nolan teaches the invention described in claim 8, including receiving an incoming transaction (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device (Nolan, col. 2, lines 46-49) and assigning a priority to the incoming transaction (Nolan, col. 27, lines 65-67) relative to other incoming transactions (Nolan, col. 28, line 66 – col. 29, line 35) at the network storage device.

Nolan does not explicitly teach a usage policy.

However, Kanada teaches the use of a packet being transmitted from one network device to another (Kanada, page 1, paragraph 17), and the meta data field being read against a usage policy (Kanada, page 1, paragraph 19) and the transaction ordered in a queue according to priority (Kanada, page 10, paragraph 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

The combination of Nolan and Kanada does not explicitly teach the use of meta data.

However, the Microsoft Computer Dictionary defines “meta data” as “data about data.” Comer teaches the use of a packet that includes a header which contains information about the contents of the data and a data area (Comer, page 92, Fig. 7.2), and the header also

contains information on the precedence of the packet (Comer, page 93, Fig. 7.4). In the Differentiated Services technique, Kanada describes the DSCP as a value that describes an aggregate of packets (Kanada, page 1, paragraph 19), and therefore this header would be considered meta data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Nolan and Kanada in view of Comer in order to enable the use of meta data. One would have been motivated to do so because all three references discuss the TCP/IP protocol (Nolan, col. 8, lines 20-21; Kanada, page 5, paragraph 88, Comer, page 92), which include a packet structure that includes a header and a data area.

26. With respect to claim 20, Nolan teaches an apparatus for managing a number of incoming and outgoing transactions (Nolan, col. 28, line 66 – col. 29, line 35) at a network storage device (Nolan, col. 2, lines 46-49).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches means for reading meta data from the number of incoming and outgoing transactions at the network storage device; and means for prioritizing the number of incoming and outgoing transactions based at least in part on the meta data, where the prioritizing means reside at the network storage device (Kanada, Fig. 3B, element 381; page 10, paragraph 152).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal

Art Unit: 2155

human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

27. With respect to claim 21, Nolan teaches the invention described in claim 20, including an apparatus means for transmitting the number of transactions based at least in part on priority (Nolan, col. 28, line 66 – col. 29, line 35).

28. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan in view of Kanada and further in view of Mahon, et al (“Requirements for a Policy Management System,” 1999).

29. With respect to claim 12, Nolan teaches the invention described in claim 8, including computer readable storage medium at the network storage device (Nolan, col. 2, lines 46-49) and comprising program code for prioritizing the plurality of incoming transactions relative to one another (Nolan, col. 28, line 66 – col. 29, line 35).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches a usage policy comprising of a number of rules (Kanada, page 2, paragraph 27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal

human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

Nolan teaches the invention described in claim 8, including computer readable storage medium at the network storage device (Nolan, col. 2, lines 46-49) and comprising program code for prioritizing the plurality of incoming transactions relative to one another (Nolan, col. 28, line 66 – col. 29, line 35).

Nolan does not explicitly teach a usage policy.

However, Kanada teaches a usage policy comprising of a number of rules (Kanada, page 2, paragraph 27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nolan in view of Kanada in order to enable the use of a usage policy. One would have been motivated to do so in order to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly.

The combination of Nolan and Kanada does not explicitly teach default rules.

However, Mahon teaches a default rule that is enacted if none of the other rules match the action type (Mahon, page 69).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Nolan and Kanada in view of Mahon in order to allow for the use of default rules. One would be motivated to do so to assure that the rules set forth on the network account for any contingencies and to contribute toward the goal of minimal human network administration.

Application/Control Number: 09/858,080

Page 25

Art Unit: 2155

Response to Arguments

30. Applicant's arguments filed 1 February 2006 have been fully considered, but they are not persuasive for the reasons set forth below.

31. ***Applicant Argues:*** Applicant states, "The Office Action to [sic] cites col. 27, lines 65-67 and col. 28, line 66 to col. 29, line 35 in Nolan as disclosing these recitations. These citations discuss handling of the background hot copy process. At col. 27, lines 65-67, Nolan discloses assigning a priority to the hot copy process relative to fulfilling data access requests from the client processor. At col. 28, line 66 to col. 29, line 35, Nolan discloses accepting user input to initiate a hot copy process. However, the user input is not an incoming transaction that is prioritized relative to other incoming transactions. Therefore, these recitations fail to disclose assigning priority to any of the incoming transactions relative to the other incoming transactions."

In Response: The examiner respectfully submits Nolan teaches a hot copy process is prioritized (storage server includes resources for assigning a priority to the hot copy process – see Nolan, col. 27, lines 65-67) relative to other transactions (if the priority of the hot copy process is low, then the client processor does not experience significant delay in the fulfillment of its data access requests – see Nolan, col. 27, line 67 – col. 28, line 2). The claim does not specify the transaction as coming from any particular interface (i.e., user interface, network interface, etc). Here, the hot copy process, which is initiated by a user, is

prioritized with respect to other transactions, namely data access requests. This renders the rejection proper, and thus rejection stands.

32. ***Applicant Argues:*** Applicant states, “Furthermore, claim 7 positively recites ‘said usage policy comprises a number of rules, each including meta data and a corresponding priority.’ The Office Action relies on Figure 4A and the discussion in paragraph 21 of Kanada. Figure 4A includes a rule type ‘Scheduling’ which points to table E in Figure 4B indicating the parent scheduling label is PrioritySchedul. PrioritySchedul is a scheduling method or algorithm that may be implemented, but is not a priority in itself. See, e.g., page 5, paragraph 0086. Paragraph 0021 discusses adding, removing, or updating rules, but does not disclose rules including meta data and a corresponding priority. The Office Action also relies on Figure 3B (element 381) and the discussion in paragraph 152 of Kanada. Figure 3B and paragraph 152 reference disclose that the parent scheduling label is PrioritySchedul, but again this is a scheduling method or algorithm, not a priority in itself. Therefore, none of these citations teach or suggest the recitations of claim 7.”

In Response: The examiner respectfully submits that Kanada teaches where the usage policy comprises a number of rules (either a block of the above-mentioned policy rules or a single rule may be downloaded; Fig. 4A illustrates a rule table that contains all input rules. The table is formed by a field for rule identifier, a field for rule type, a field for the condition part of the rule, and a field for the action part of a rule – see Kanada, Fig. 4A; page 2,

Art Unit: 2155

paragraph 21 and page 5, paragraph 87), each including meta data (the Microsoft Computer Dictionary defines “meta data” as “data about data.” Kanada discusses “four types of policy rules” available for an operator to input into the policy server (see Kanada, page 4, paragraph 72) and the scheduling rule containing “a condition, label, action items, rate unit, minimum rate, maximum rate, and parent scheduling label” (see Kanada, page 5, paragraph 84). These items all constitute data about data with regards to a usage policy. Kanada also discloses “In the rule 1708, a string of 198.168.4.1 is specified in the field of the lower end of source IP address of flow 1721 and the same is also specified in the field of upper end of source IP address of flow 1722. Thus, the rule 1708 is effective only for packets originating from the IP address 192.168.4.1” (see Kanada, page 10, paragraph 148). This states the rules can then be compared against incoming data, and sorted accordingly into queues (see Kanada, page 9, paragraph 137)) and a corresponding priority (the rules can be rearranged such that defined variables always precede those that are used in a condition. In the present embodiment, the rule identifiers are rearranged in order such as #1, #2, #4, #3, #5 or #1, #3, #5, #2, #4 – see Kanada, page 6, paragraphs 100-106). This recitation states that rules where variables are defined that will be used in dependent rules must be executed before those dependent rules. Therefore, these independent rules must have priority of execution over the dependent rules. This renders the rejection proper, and thus rejection stands.

Art Unit: 2155

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

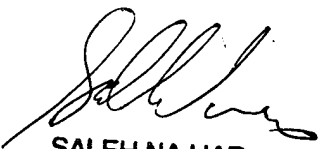
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2155

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay
April 4, 2006



SALEH NAJJAR
SUPERVISORY PATENT EXAMINER